

#23 XWS 9200/6211

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Robert E. Reiter and Owen N. Witte
Serial No.: 09/038,261
Filed: March 10, 1998
Notice of
Allow. Date:
Due Date:
Title: PSCA: PROSTATE STEM CELL ANTIGEN AND USES THEREOF

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PATENT & TRADEMARK OFFICE

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described hereinabove, are being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on October 31, 2000.

By: Renato Marco P. Domingo
Renato Marco P. Domingo

Box Official Draftsperson
Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

We are transmitting herewith the attached:

- Transmittal Sheet in duplicate containing Certificate of Mailing
- Submission of Formal Drawings
- 21 sheets of formal drawings
- Return postcard

Please charge any additional fees or credit overpayment to Deposit Account No. 50-0306. A duplicate of this sheet is enclosed.

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(626)395-7801

By: Sarah B. Adriano
Name: Sarah B. Adriano
Reg. No.: 34,470
Initials: SBA

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TC 3700 MAIL ROOM

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: R. Reiter et al. **Examiner:** L. Helms
Serial No.: 09/038,261 **Group Art Unit:** 1642
Filed: March 10, 1998 **Docket No.:** 30435.54USU1
Title: PSCA: PROSTATE STEM CELL ANTIGEN AND USES THEREOF

CERTIFICATE UNDER 37 CFR 1.8:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on October 31, 2000.

Renato Marco Domingo

Renato Marco Domingo



SUBMISSION OF FORMAL DRAWINGS

Assistant Commissioner for Patents
Attn: Official Draftsman
Washington, D.C. 20231

RECEIVED
DEC - 6 2000
TC 3700 MAIL ROOM

Dear Sir:

Submitted herewith are 21 sheets of Formal Drawings for completion of this application, and in compliance with the requirements of the Official Communication from the Examiner dated December 6, 1999.

Respectfully submitted,

Sarah B. Adriano

Roberta D. German
Registration No. 43,902
Sarah B. Adriano
Registration No. 34,470
Attorneys for Applicants
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35 N. Arroyo Parkway, Suite 60
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626/ 395-7801

6267960

FIG. 1A

1 agggagaggc agtgaccatg aaggctgtgc tgcttgcctt gttgatggca
51 ggcttggccc tgcagccagg cactgccctg ctgtgctact cctgcaaagc
101 ccaggtgagc aacgaggact gcctgcagg ggagaactgc acccagctgg
151 gggagcagtg ctggaccgcg cgcacatccgcg cagttggcct cctgaccgtc
201 atcagcaaag gctgcagctt gaactgcgtg gatgactcac aggactacta
251 cgtgggcaag aagaacatca cgtgctgtga caccgacttgc tgcaacgcca
301 gcggggccca tgccctgcag ccggctgcgc ccacatccttgc gctgctccct
351 gcactcggcc tgctgctctg gggacccggc cagctataagg ctctgggggg
401 cccccgtgca gcccacactg ggtgtggtgc cccaggcctt tgtgccactc
451 ctcacagaac ctggcccaagt gggagcctgt cctgggtcct gaggcacatc
501 ctaacgcaag tttgaccatg tatgtttgca cccctttcc ccnaaccctg
551 accttccat gggcctttc caggattccn accnggcaga tcagtttag
601 tganacanat ccgcntgcag atggcccctc caaccnnttca tggtnnttt
651 tccatggccc agcattttcc acccttaacc ctgtgttcag gcactnttc
701 ccccaaggaag cttccctgc ccacccatt tatgaattga gccaggttg
751 gtccgtggtg tccccgcac ccagcagggg acaggcaatc aggagggccc
801 agtaaaggct gagatgaagt ggactgagta gaactggagg acaagagttg
851 acgtgagttc ctgggagttt ccagagatgg ggcctggagg cctggaggaa
901 ggggcccaggc ctcacatttgc tgggntccc gaatggcagc ctgagcacag
951 cgtaggccct taataaacac ctgttggata agccaaaaaaa aaaaaaaaaa

FIG. 1B

MKAVLLALLMAGLALQPGTALLCYSCAQVSNEDCLQV
ENCTQLGEQCWTARIRAVGLTVISKGCSLNCVDDS
QDYYVGKKNITCCDTDLCNASGAHALQPAAAILALLPAL
GLLLWGPQQL

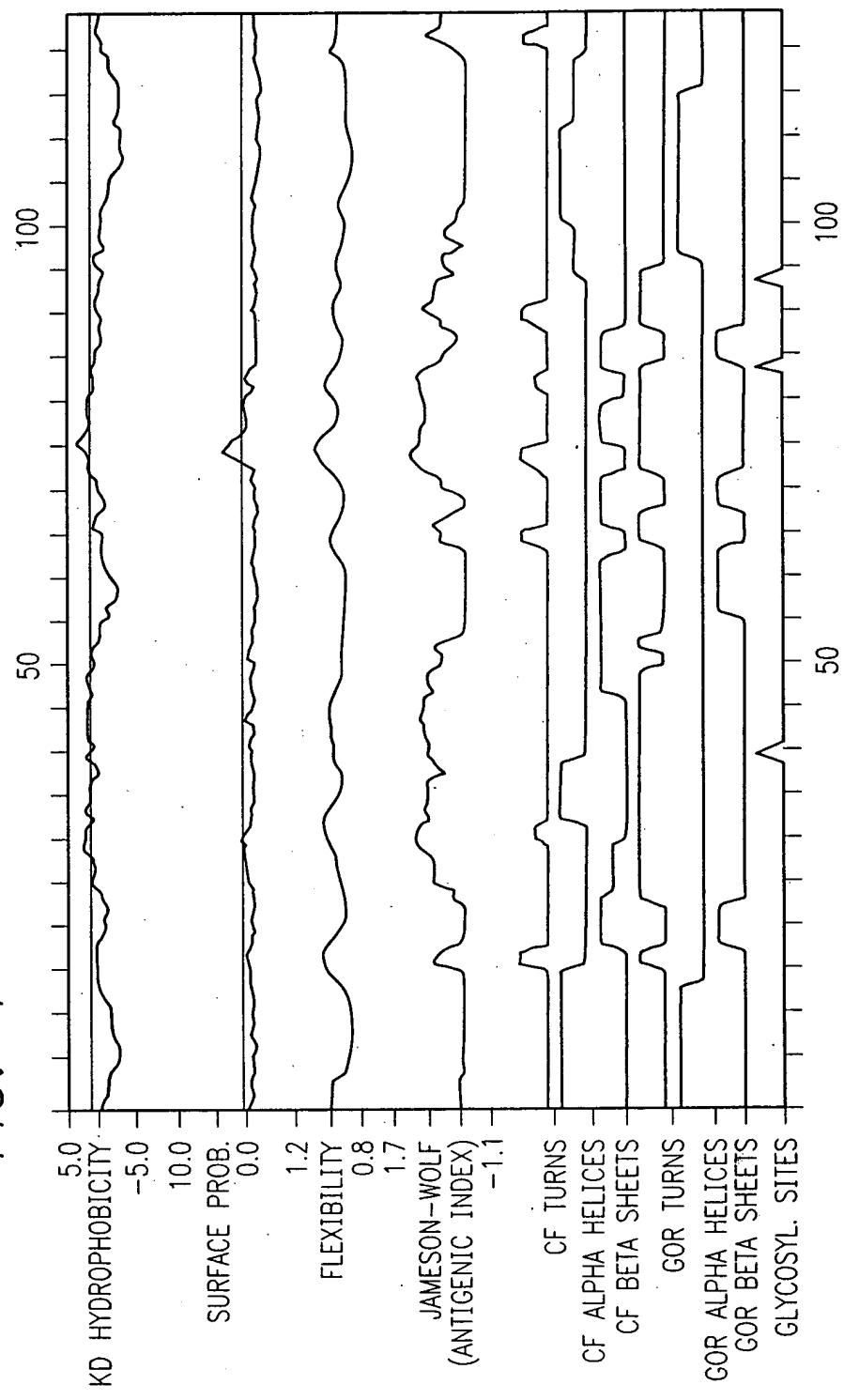
FIG. 2

ATGAAGACAGTTTTTTATCCTGCTGGCCACCTACTTAGCCCTGCATCCAGGTGCTGCT
1 -----+-----+-----+-----+-----+-----+ 60
TACTTCTGTCAAAAAAAATAGGACGACCGGTGGATGAATGGGACGTAGGTCCACGACGA
M K T V F F I L L A T Y L A L H P G A A
CTGCAGTGCTATTATGCACAGCACAGATGAACAAACAGAGACTGTCTGAATGTACAGAAC
61 -----+-----+-----+-----+-----+-----+ 120
GACGTCACGATAAGTACGTGTCGTCTACTTGTGTCTGACAGACTTACATGTCTTG
L Q C Y S C T A Q M N N R D C L N V Q N
TGCAGCCTGGACCAGCACAGTTGCTTACATCGCGATCCGGGCCATTGGACTCGTGACA
121 -----+-----+-----+-----+-----+-----+ 180
ACGTCGGACCTGGTGTCAACGAAATGTAGCGCGTAGGCCGGTAACCTGAGCACTGT
C S L D Q H S C F T S R I R A I G L V T
GTTATCAGTAAGGGCTGCAGCTCACAGTGTGAGGATGACTCGGAGAACTACTATTTGGC
181 -----+-----+-----+-----+-----+-----+ 240
CAATAGTCATTCCGACGTCGAGTGTACACTCCTACTGAGCCTTGTGATGATAAACCG
V I S K G C S S Q C E D D S E N Y Y L G
AAGAAGAACATCACGTGCTGCTACTCTGACCTGTGCAATGTCAACGGGGCCACACCCCTG
241 -----+-----+-----+-----+-----+-----+ 300
TTCTTCTTGTAGTGCACGACGATGAGACTGGACACGTTACAGTTGCCCGGGTGTGGAC
K K N I T C C Y S D L C N V N G A H T L
AAGCCACCCACCACCTGGGGCTGCTGACCGTGCTCTGCAGCCTGTTGCTGTGGGCTCC
301 -----+-----+-----+-----+-----+-----+ 360
TTCGGTGGGTGGTGGGACCCCGACGACTGGCACGAGACGTCGGACAACGACACCCCGAGG
K P P T T L G L L T V L C S L L L W G S
AGCCGTCTGTAGGCTCTGGGAGAGCCTACCATAGCCCATTGTGAAGGGATGAGCTGCAC
361 -----+-----+-----+-----+-----+-----+ 420
TCGGCAGACATCCGAGACCCCTCGGATGGTATGGCTAACACTCCCTACTCGACGTG
S R L *
TCCACCCCCACCCCCACACAGG
421 -----+-----+-----+ 441
AGGTGGGGTGGGGTGTGTC

FIG. 3

1	M	K	I	F	L	P	V	L	A	A	L	L	G	V	E	R	A	S	S	hSCA-2
1	M	K	A	V	L	A	L	L	M	A	G	L	A	L	O	P	G	T	A	hPSCA
1	M	K	T	V	I	F	L	L	A	T	Y	L	A	L	H	P	G	A	A	mPSCA
21	L	M	C	F	S	C	L	N	Q	K	S	N	L	Y	C	L	K	P	T	I
21	L	L	C	Y	S	C	K	A	Q	V	S	N	E	D	C	L	Q	V	E	N*
21	L	Q	C	Y	S	C	T	A	Q	M	N	N	R	D	C	L	N	V	Q	N*
41	C	S	D	Q	D	N	Y	C	V	T	V	S	A	S	A	G	I	G	N	L
41	C	T	Q	L	G	E	Q	C	W	T	A	R	I	R	A	V	G	L	T	
41	C	S	L	D	Q	H	S	C	F	T	S	R	I	R	A	I	G	L	V	
61	V	T	F	G	H	S	L	S	K	T	C	S	P	A	C	P	I	P	E	G
61	V	-	-	-	-	-	-	I	S	K	G	C	S	L	N	C	V	D	D	Q
61	V	-	-	-	-	-	-	I	S	K	G	C	S	S	Q	C	E	D	D	E
81	V	N	V	G	V	A	S	M	G	I	S	C	C	Q	S	F	L	C	N	F
76	D	Y	Y	V	G	K	K	-	N	I	T	C	C	D	T	D	L	C	N	A
76	N	Y	Y	L	G	K	K	-	N	I	T	C	C	Y	S	D	L	C	N	V
101	S	A	A	D	G	G	L	R	A	S	V	T	E	L	G	A	G	L	L	
95	S	G	A	H	A	L	O	P	A	A	A	I	I	L	A	L	P	A	G	
95	N	G	A	H	T	L	K	P	T	T	L	G	I	L	T	V	L	C	S	
121	S	L	L	P	A	L	R	F	G	P										
115	L	L	L	W	G	P	G	Q	L	-	-									
115	L	L	L	W	G	S	S	R	L	-	-									

FIG. 4



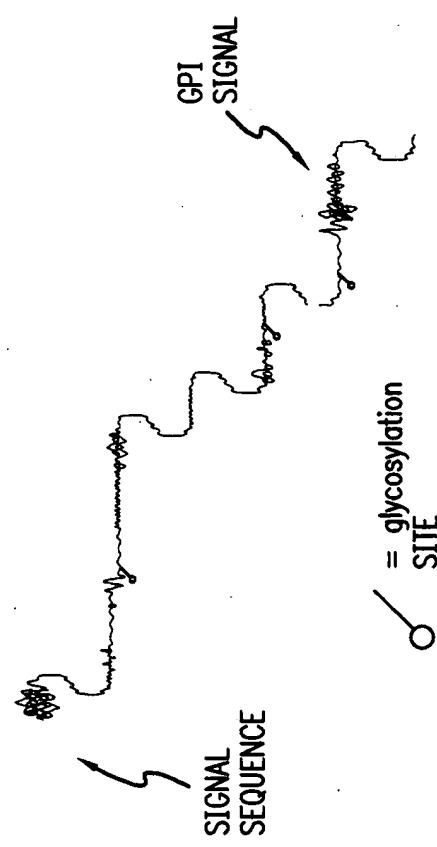
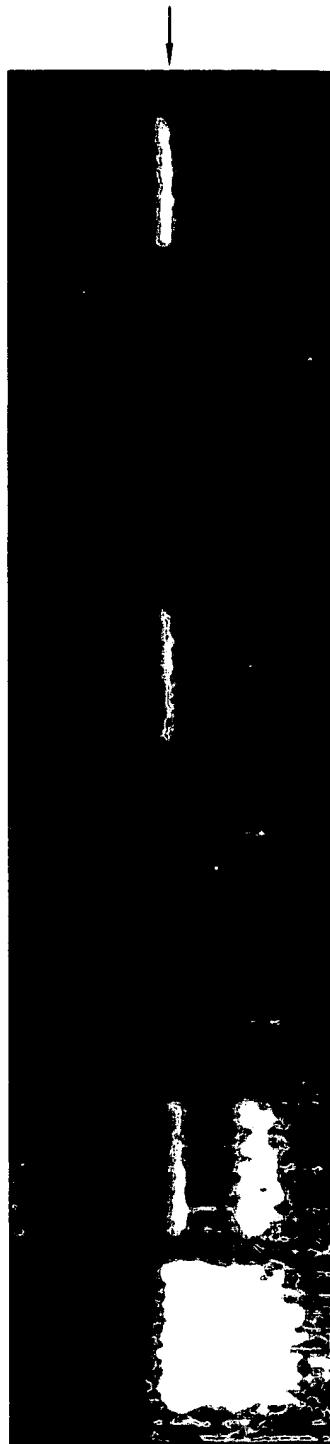


FIG. 5

FIG. 6

NORMAL
LNCAP AI
MATLYLU
DU145
PC3
LAPC-7 **
LAPC-3
LAPC-4 AI



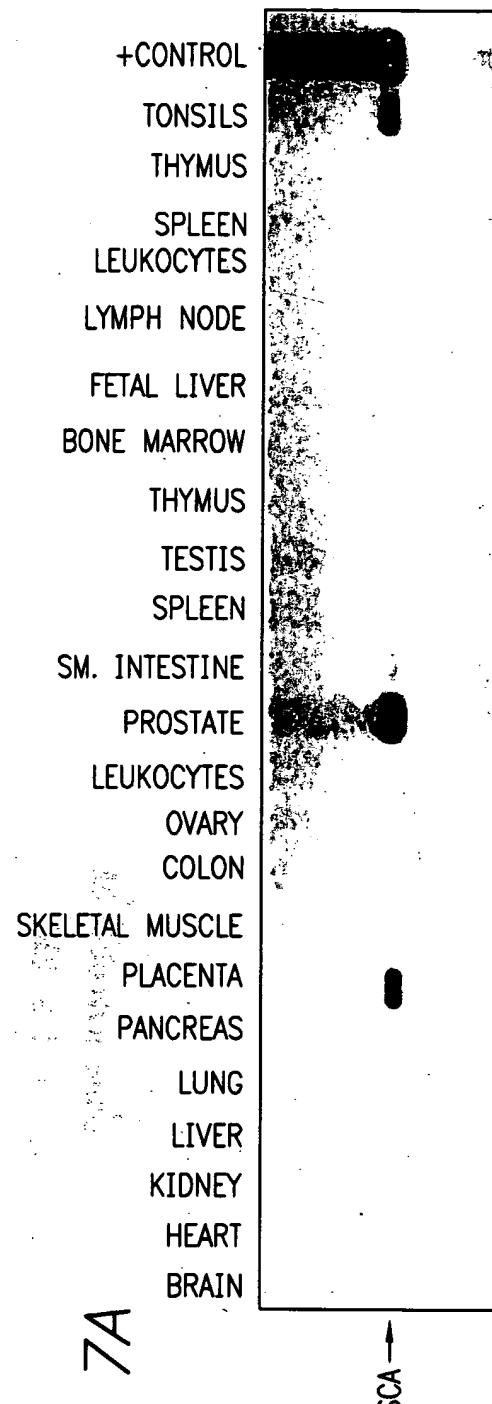


FIG. 7A

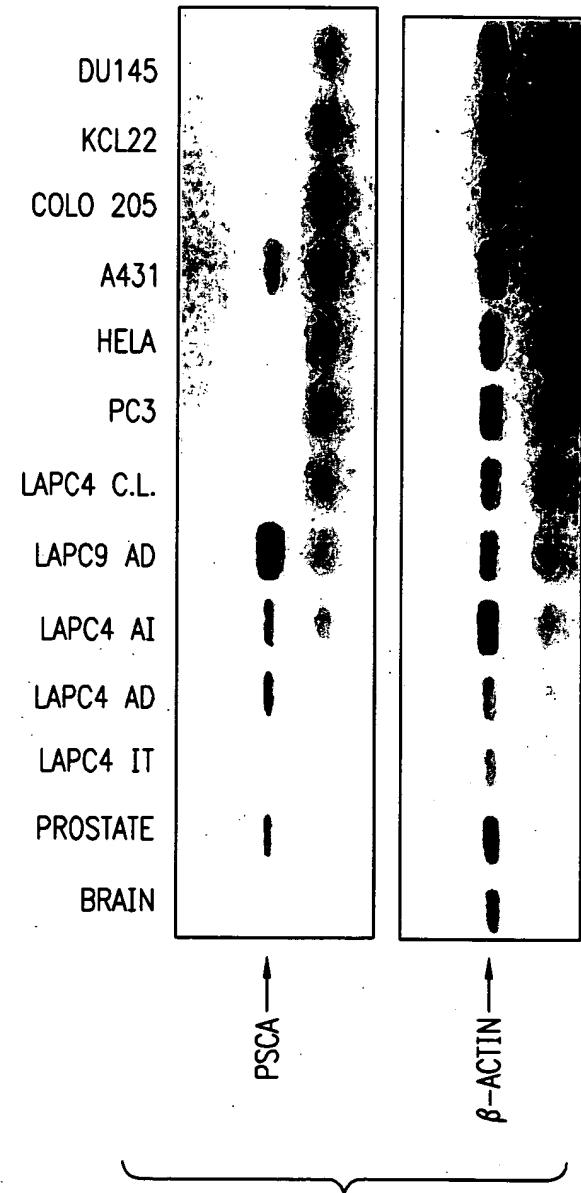


FIG. 7B

FIG. 8A

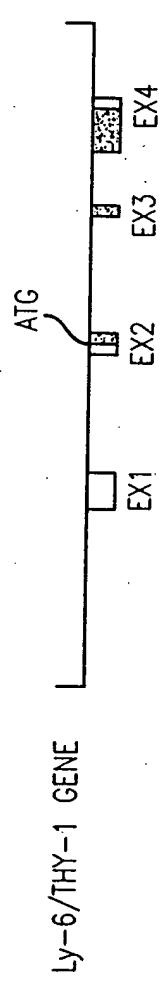


FIG. 8B

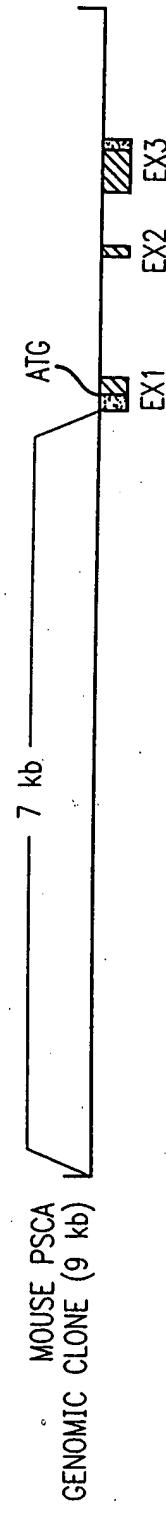


FIG. 8C

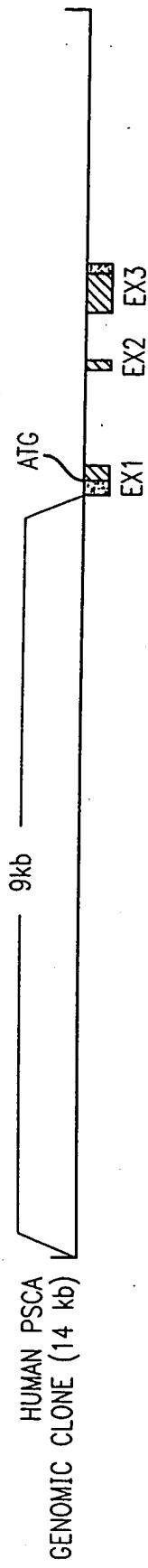


FIG. 9A

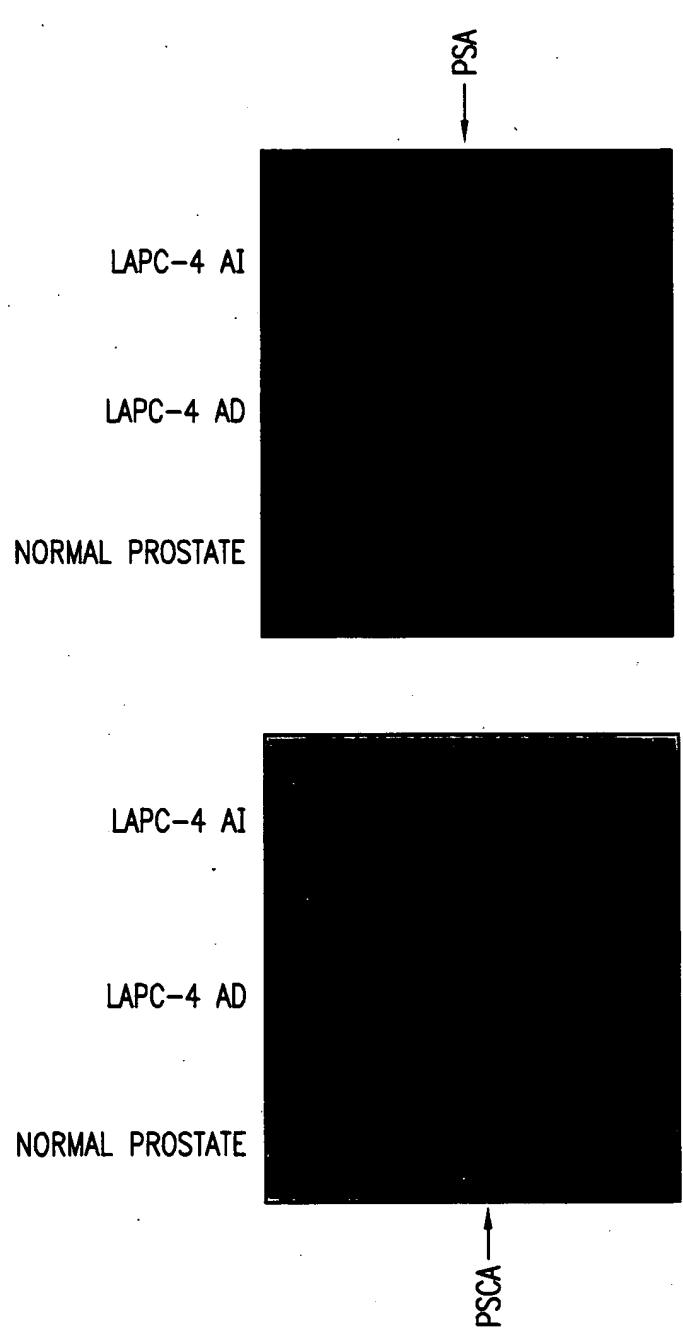
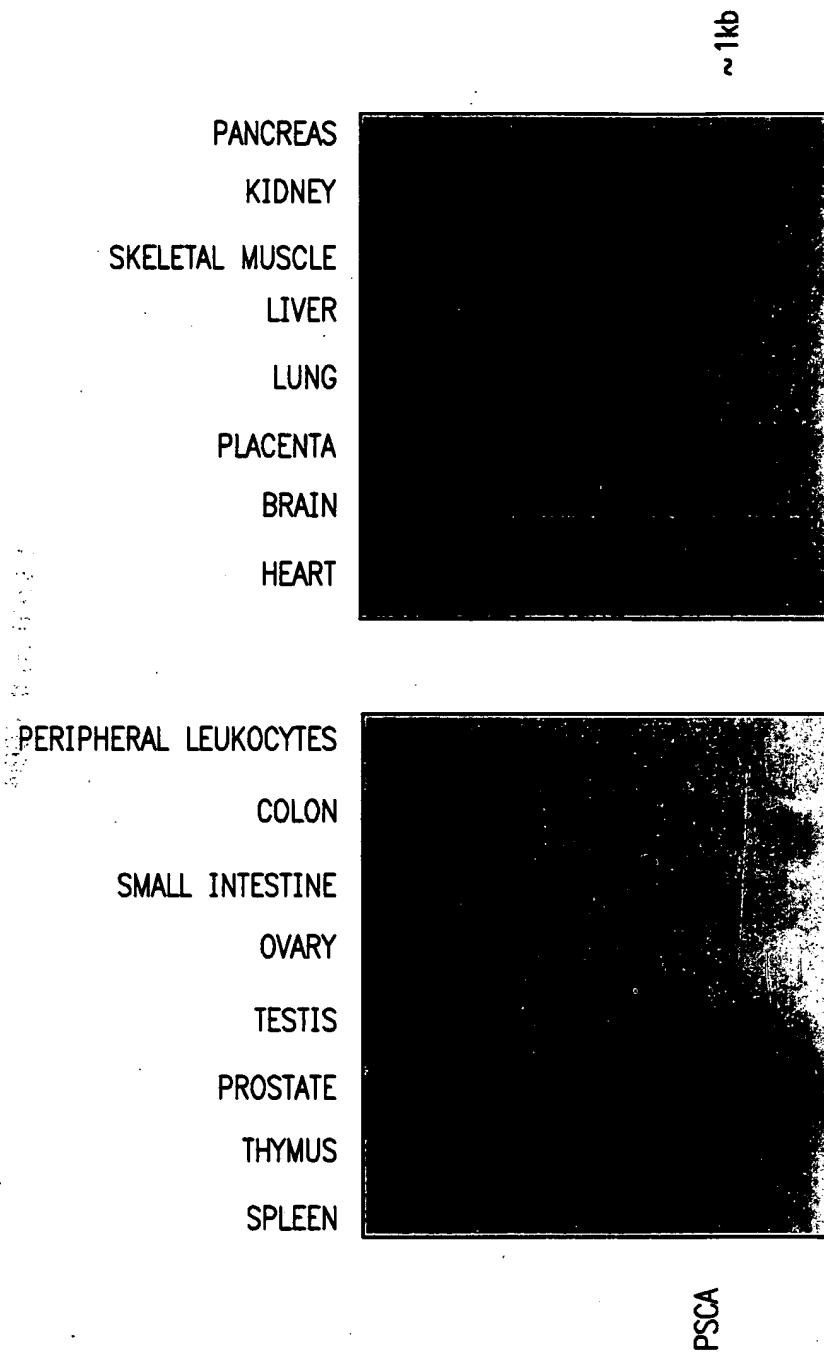


FIG. 9B



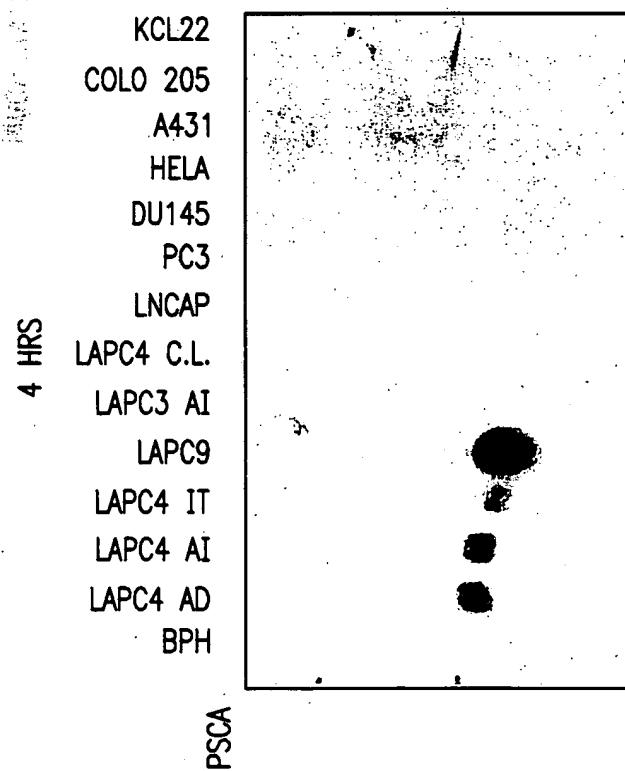
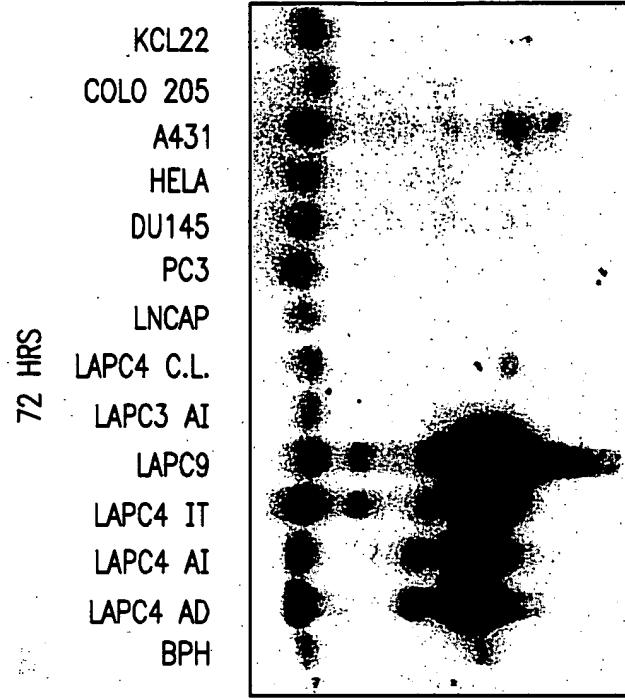


FIG. 10-1

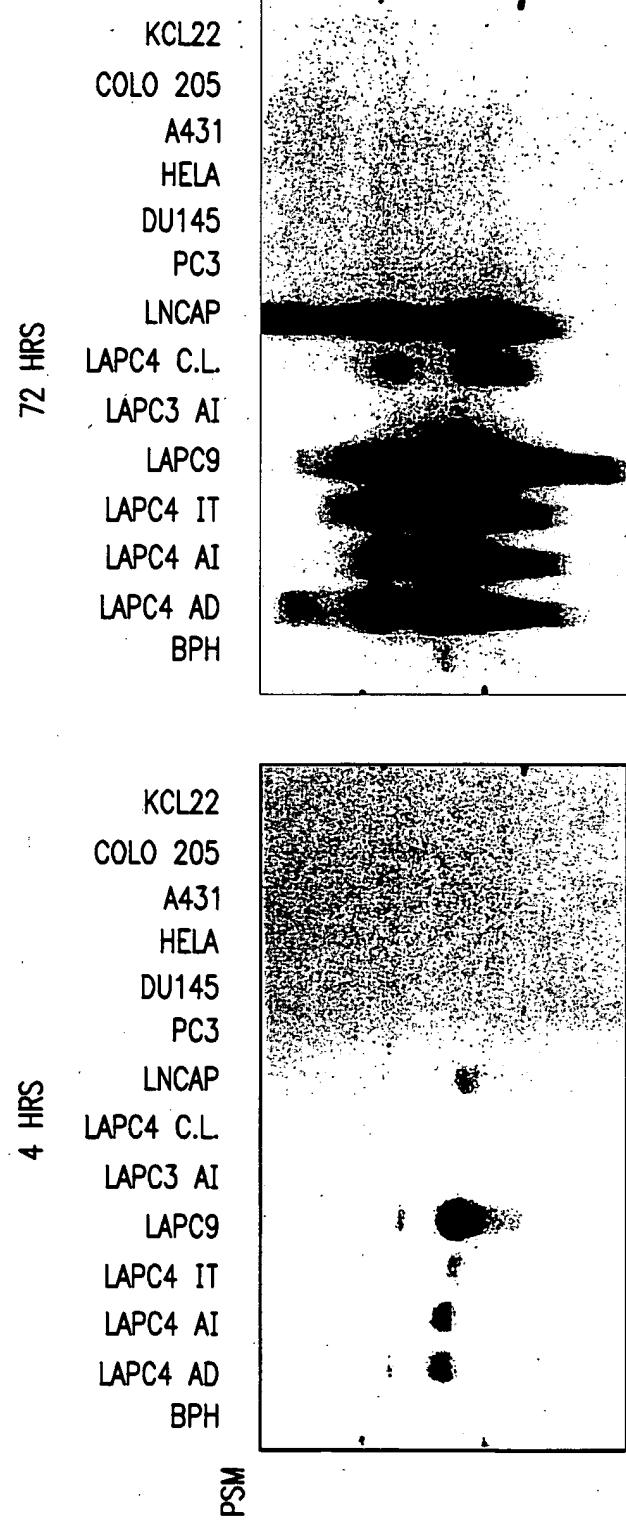


FIG. 10-2

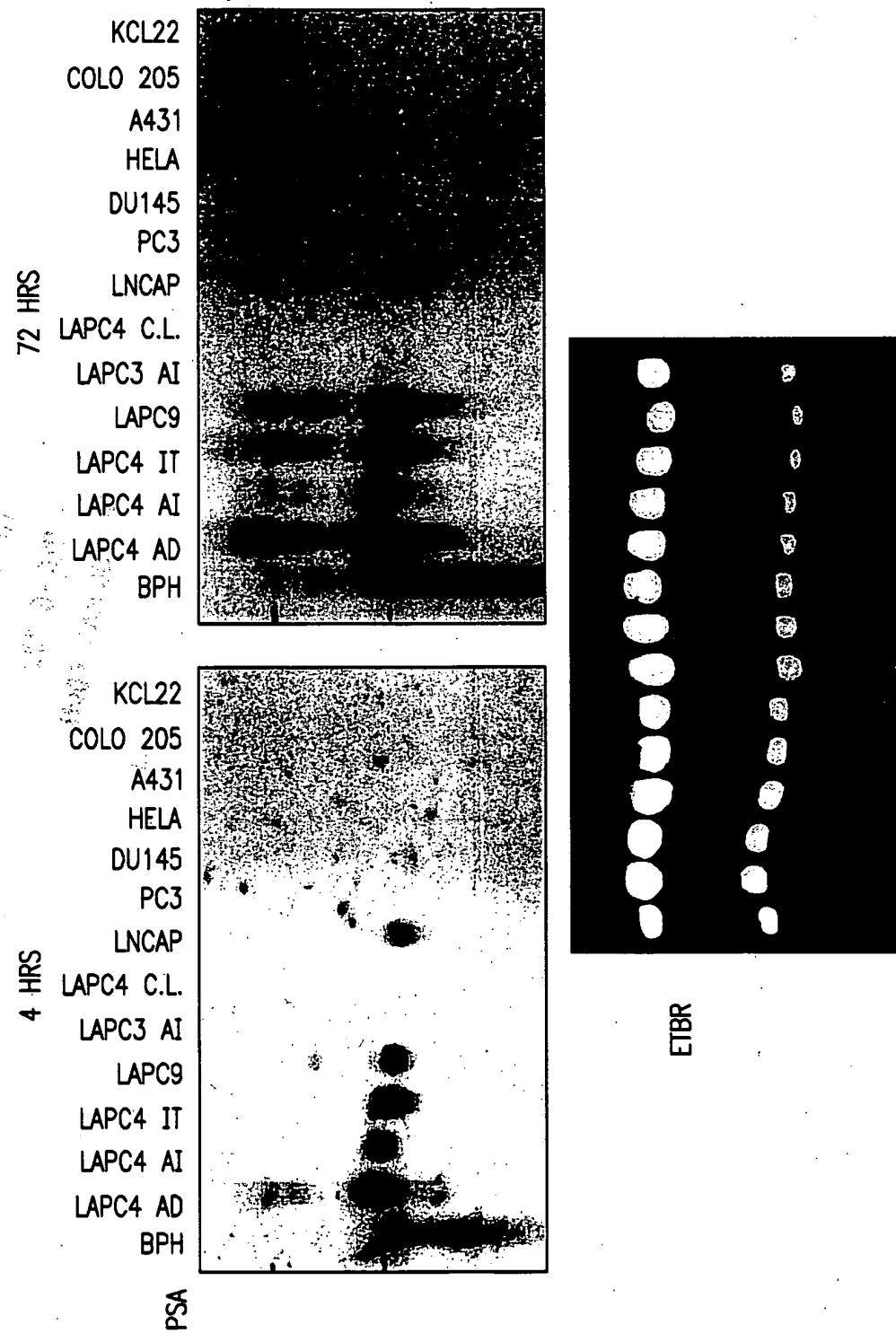


FIG. 10-3

FIG. 11A



FIG. 11B



FIG. 11C

FIG. 12A

SECRETED
CELL ASSOCIATED
O GLYCOSIDASE
N GLYCOSIDASE F
CONTROL

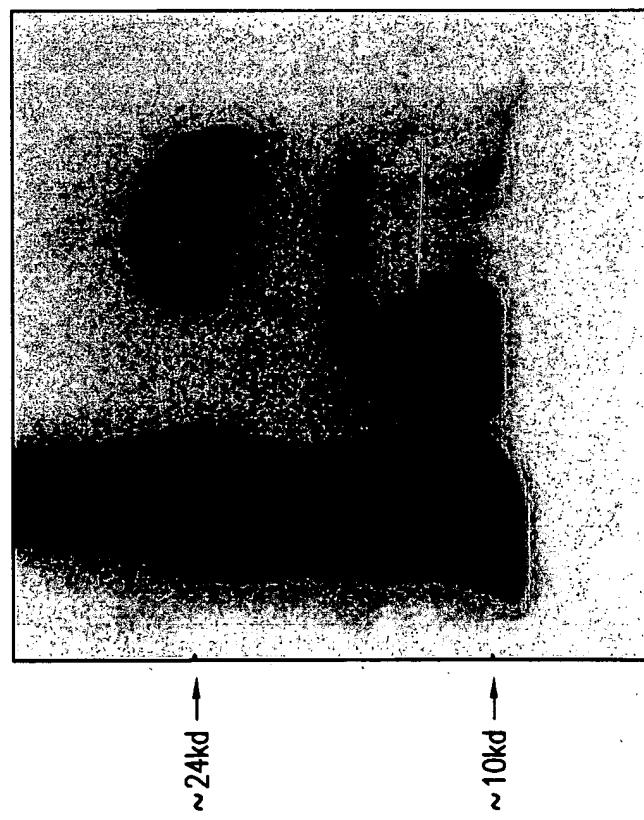
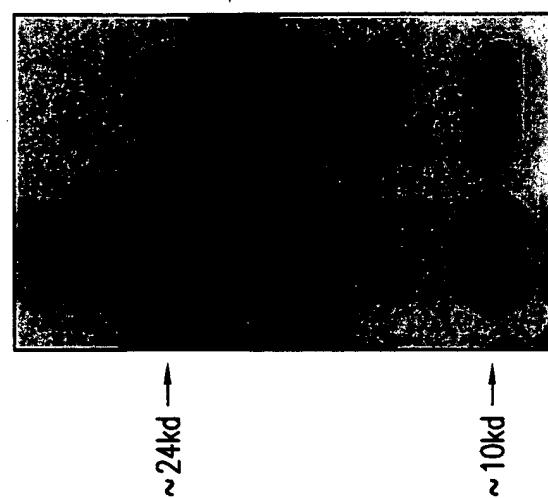


FIG. 12B



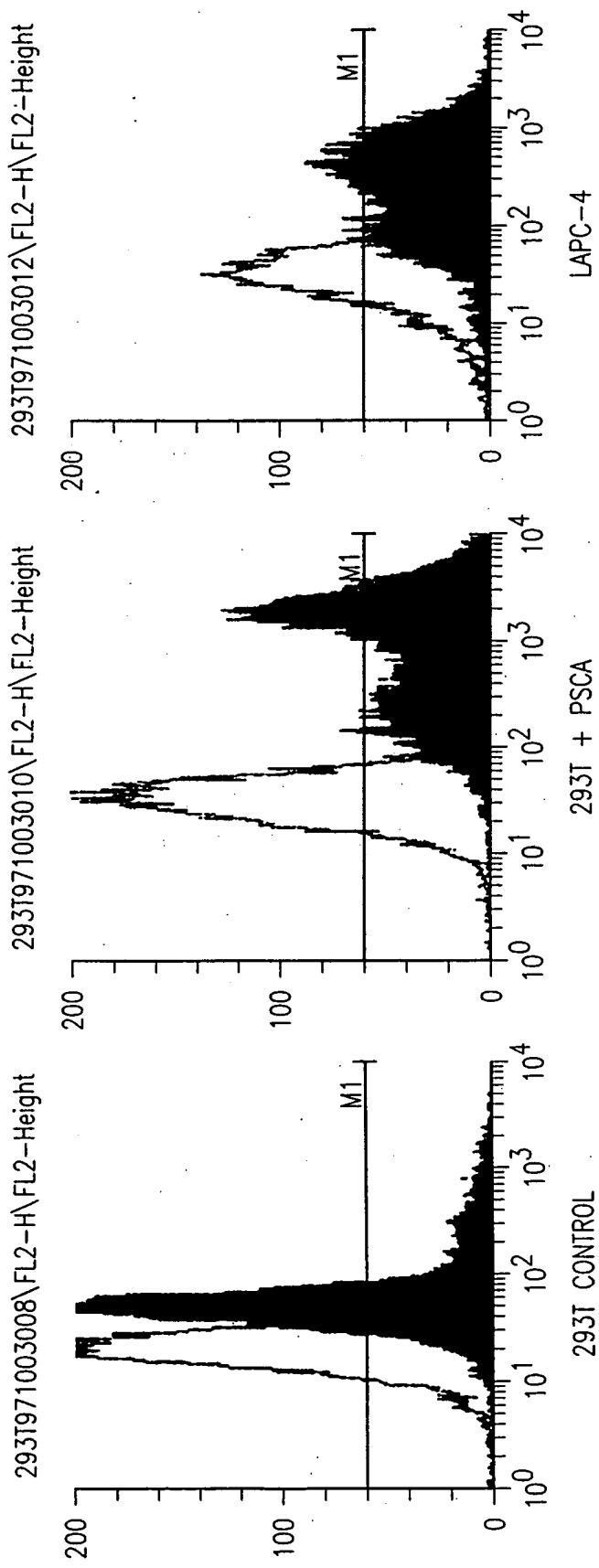


FIG. 12C

FIG. 13

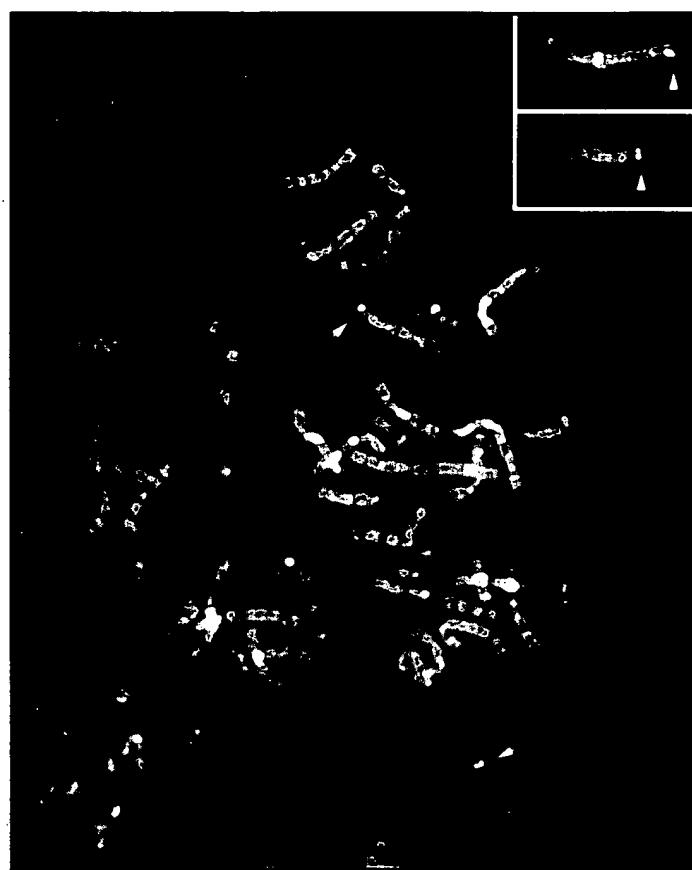


FIG. 14A

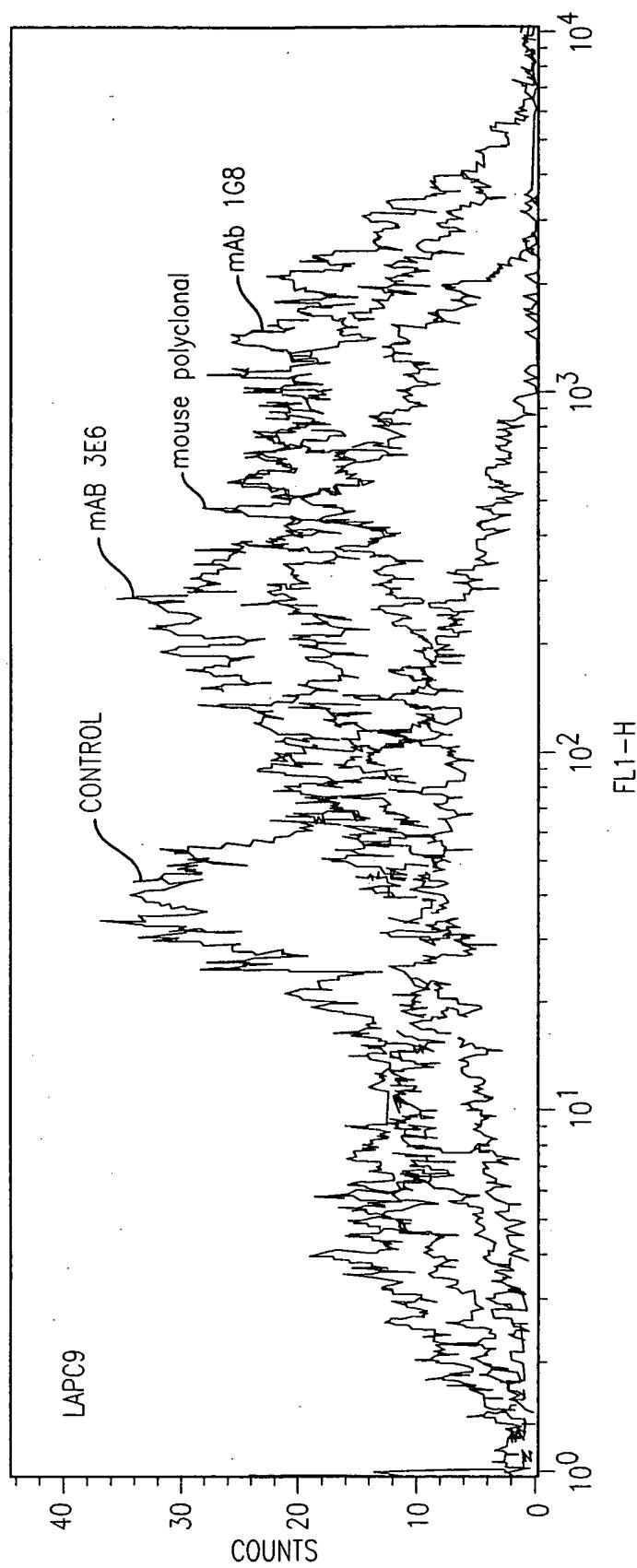


FIG. 14B

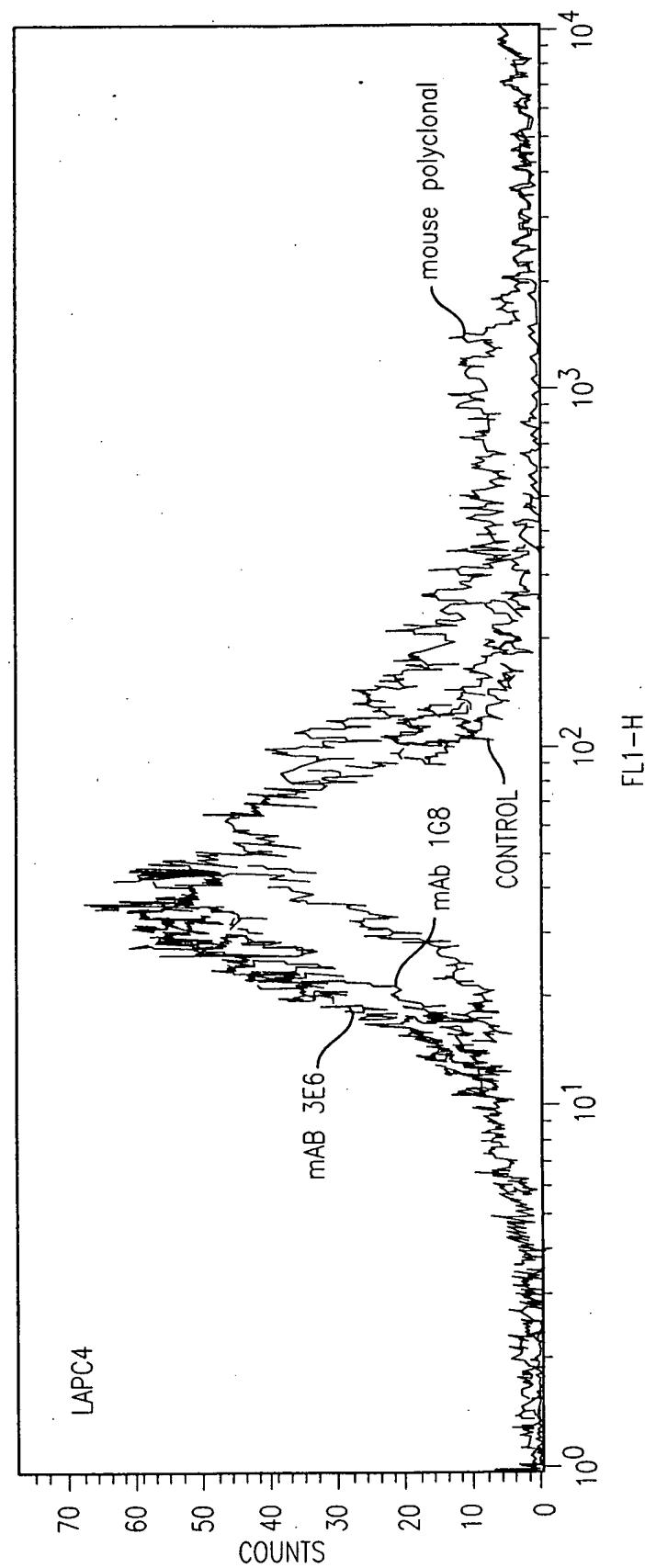


FIG. 14C

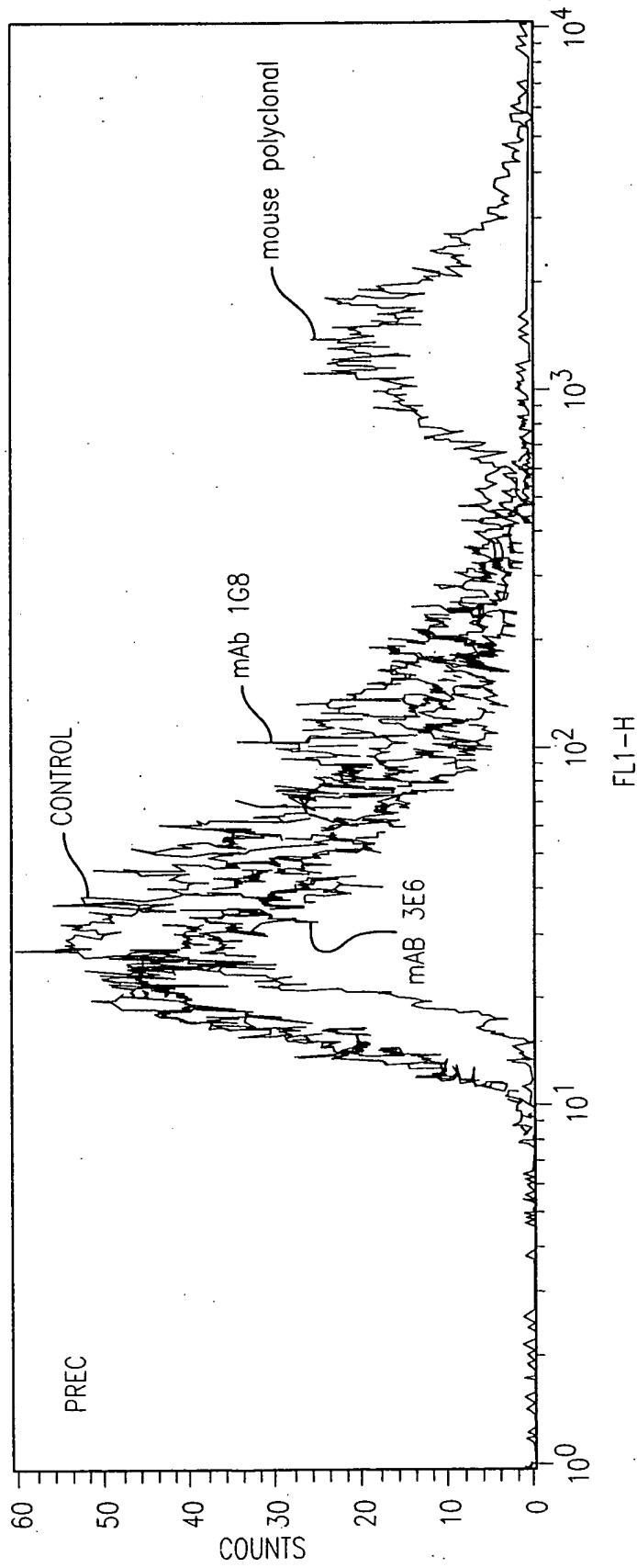


FIG. 15

